Daily Diary Report by Bid Item

Contract No.: **04-0120F4**
Diary #: **396** **Const Calendar Day:** 116 **Date:** **28-Sep-2012** **Friday**
Inspector Name: **Wright, Doug** **Title:** **Transportation Engineer**
Inspection Type: Continuous
Shift Hours: 06:40 AM 07:45 PM **Break:** 00:30 **Over Time:** 04:00
Federal ID:
Location:
Reviewer: **Schmitt, Alex** **Approved Date:** **Status:** Submit

04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge

Weather

Temperature **7 AM** **12 PM** **4PM**
Precipitation **Condition**

Working Day ☑ If no, explain:

Diary:

Dispute ☐

Phase 1 Load Transfer

Overview of Cable work today:
The following work was ongoing today on the Cable:
- Phase-1 load transfer (LT) step for additional rotation of the cable continued
- Phase-2 LT was started
- Re-tensioning of cable band (CB) bolts
- Installation of suspender anchor rods
- Prep work for phase-3 LT

Today I was measuring minimum thread engagement on suspender anchor rods, watching the jacking pressures while loading the phase- LT suspenders, & other misc inspection. See the diaries of L. Woo, S. Daouk, & P. Jalali for additional details of the work on the South cable as they were also inspecting this work. See the diary of others for information on the North cable suspender jacking & CB bolt tensioning.

- I arrived at the pier 7 office at 06:40, & was on the bridge at 07:00.
- From 07:00 until 11:30, I was inspecting the minimum thread engagement on suspender anchor rods on the South cable. The crews were going back to rods that we had previously marked as not meeting the minimum thread engagement, & re-working them to thread the rods in more. As the crews completed the rods at a given PP, I would check the rods again to make sure that the minimum thread engagement was achieved.
- From 11:30 until 12:00, I checked the suspender center marks at PP48S. This suspender had just been loaded during phase-2 LT. The suspender center marks were aligned with the top CB groove. Also, I checked the suspender center marks at PP48N at the request of Victor Altimarano. They had an issue because the suspender center mark on the uphill suspender was offset from the CB top groove by about 450mm. However, the suspender sockets were pulled all the way down to the shim packs, & a check of the CB rotation showed that it was not rotated. ABF Engineer Adam Reeve laid out a new suspender center mark half-way between the suspender zinc buttons. This new mark was about 4mm from a faint red marker line on the suspender. This faint red line is most likely the true center mark, & the broad paint mark 450mm away was most likely misplaced. I informed Victor & Roman Granados of what I had observed.
- At 12:15, I left the bridge.
- From 12:30 until 13:00, I ate lunch.
- From 13:00 until 13:15, I attended a Cable group safety meeting. The topic was first aid.
- From 13:15 until 14:15, I did misc office work at pier 7.
- At 14:30, I arrived back on the bridge.
- At 14:45, I spoke with ABF Engineer Andre Markarian regarding one of the suspender ropes at PP68S (the West out-board suspender). It appeared to be twisted 360 degrees between the socket & the CB.

Note: this 360 degree twist was corrected later in the day.
- From 14:45 until 15:30, I checked all phase-3 suspenders on the South cable for twist between the socket & the CB. No additional twisted suspenders were noticed.
- From 15:30 until 17:00, I was inspecting the minimum thread engagement on suspender anchor rods on the South cable. As the crews completed the rods at a given PP, I would check the rods again to make sure that the minimum thread engagement was achieved.
- From 17:00 until 18:00, I checked the CB rotation on all CBs in the South main-span. I used a digital level placed along the stanchion pads. The theoretical angle on this pad should be 90 degrees (plumb). The measured angles were within + or – 1 degree of plumb for the CBs between PP44S & PP96S. From PP98S & above, the angles varied up to -7 degrees. Note: the CBs from PP98S & above do not have their suspenders loaded directly as the load on the cable at these locations is held on the jacking bracket cable grabber (loaded directly on the cable). These will be re-checked after the load is transferred to the suspenders.
- From 18:00 until the end of the shift, I inspected the ABF crews as they jacked on the suspenders at PPs 34S, 30S, 26S, 22S, & 18S. This was a continuation of phase-1 LT to correct cable rotation & transfer the load from the temporary jacking rods to the permanent anchor rods. The maximum jacking pressure noticed during this LT suspender jacking was 7900 psi, which was within the DNE of 9069 psi.
- At 19:10, the crews wrapped up their tools to end their shift.
- At 19:20, I left the bridge.
- From 19:30 until 19:45, I wrote my diary for the day & checked email.
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04-0120F4 **Bid Item:** **067** **C-SUS-BGS.067** **Attach BG Lifts to Suspenders**

AMERICAN BRIDGE/FLUOR, A JV